## **Non-Technical Abstract**

This study involves the use of an experimental product, MVA-HPV-IL2 (code number TG4001), to determine if it is safe and if this therapy, injected into the muscle of the arm, can help stimulate the body's immune system to kill cells infected with the virus causing cervical cancer. Patients with cervical intraepithelial neoplasia (CIN), grade 3 are eligible to enroll into this study. The treatment involves a modified vaccinia virus vector (delivery system) containing the genes for the human papillomavirus (HPV) and for interleukin-2 (IL2). IL-2 is a naturally occurring substance that stimulates the immune system. The HPV gene sequence has been altered to prevent it from causing any harm The vaccinia virus used for this product was used for the smallpox vaccination campaign and was specifically designed to be a safer form of the vaccine..

TG4001 is given as a shot directly into the muscle of the arm once a week for 3 weeks prior to the removal of the dysplasic cervical cells. The first three patients will receive the lowest dose,  $5x10^5$  p.f.u. If, after all 3 patients have received and tolerated all 3 injections, the next three patients will be entered into the study and will receive the next (middle or  $5x10^6$ ) dose level. This procedure will continue until the  $5x10^7$  dose level is reached, unless severe toxicity to one of the doses is observed. If severe toxicity is seen, no further dose escalation will occur.